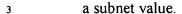
IN THE CLAIMS:

- 1. (Currently Amended) A method of operating a switch for frames in a computer net-
- work, comprising:
- receiving a frame (the received frame) at a port of said switch, said received
- 4 frame containing one or more indicia of frame type designation;
- deriving a virtual local area network (derived VLAN) value in response to said
- one or more indicia of frame type designation, said derived VLAN internal to said
- 7 switch;
- accessing a forwarding data base with said derived VLAN value to determine a
- 9 destination address; and,
- forwarding, in response to said derived VLAN value, said received frame to an
- output port for transmission to the destination.
- 2. (Original) The method of claim 1 further comprising, said forwarding step forwarding
- in response to said derived VLAN value and said destination.
- 3. (Original) The method of claim 1 wherein said indicia of frame type designation fur-
- ther comprises:
- a protocol type.
- 4. (Original) The method of claim 1 wherein said indicia of frame type designation fur-
- ther comprises:

Seq. #4089



- 5. (Original) The method of claim 1 wherein said indicia of frame type designation fur-
- ther comprises:
- a virtual local area network established in said computer network.
- 1 6. (Original) The method of claim 1 wherein said indicia of frame type designation fur-
- ther comprises: an IP source address.
- 7. (Original) The method of claim 1 wherein said indicia of frame type designation fur-
- 2 ther comprises:
- an index value associated with a port at which said received frame was received.
- 8. (Original) The method of claim 1 further comprising:
- deriving a MAC address from said derived VLAN value and forwarding said re-
- ceived frame to a port for transmission to a destination having said MAC address.
 - 9. (Currently Amended) A switch to forward frames in a computer network, comprising:
- a port to receive a frame (the received frame), said received frame containing one
- or more indicia of frame type designation;

- a parsing engine to derive a virtual local area network (derived VLAN) value in
 response to said one or more indicia of frame type designation, said derived VLAN internal to said switch;
 a forwarding data base having said derived VLAN value as input and a destination address as output; and,
 an output port to transmit said received frame, in response to said derived VLAN
 value, for transmission to said destination address.
- 10. (Original) The apparatus as in claim 9 further comprising:
- a forwarding engine for forwarding said received frame in response to said derived VLAN value and said destination address.
- 1 11. (Currently Amended) A computer readable media containing instructions for the
- practice of the method of claim 1 operating a switch for frames in a computer network,
- 3 <u>comprising:</u>
- receiving a frame (the received frame) at a port of said switch, said received
- frame containing one or more indicia of frame type designation;
- deriving a virtual local area network (derived VLAN) value in response to said
- one or more indicia of frame type designation, said derived VLAN internal to said
- 8 switch;
- g accessing a forwarding data base with said derived VLAN value to determine a destination address; and,
- 11 forwarding, in response to said derived VLAN value, said received frame to an output
- port for transmission to the destination.

Seq. #4089

- 12. (Currently Amended) Electromagnetic signals traveling on a computer network, said electromagnetic signals carrying information to practice the method of claim 1 of operat-
- ing a switch for frames in a computer network, comprising:
- receiving a frame (the received frame) at a port of said switch, said received
- frame containing one or more indicia of frame type designation;
- deriving a virtual local area network (derived VLAN) value in response to said
- one or more indicia of frame type designation, said derived VLAN internal to said
- 8 switch;
- g accessing a forwarding data base with said derived VLAN value to determine a destination address; and,
- forwarding, in response to said derived VLAN value, said received frame to an output port for transmission to the destination.
- 13. (Currently Amended) A method of operating a switch for frames in a computer network comprising:
- using one or more indicia of frame type designation found in the <u>a</u> received frame
- to derive a virtual local area network (derived VLAN) value, said derived VLAN internal
- 5 to said switch;
- 6 using the derived VLAN value in making forwarding decisions.
- 14. (Original) The method of claim 13 further comprising:
- 2 controlling broadcast domains in the computer network by forwarding in response
- to the derived VLAN value.
 - 15. (currently Amended) The method of claim 13 further comprising:

Seq. #4089

| 2 | using an indicia of the a receiving port in constructing the derived VLAIN value. |
|---|---|
| 1 | 16. (Currently Amended) A computer readable media containing instructions for the |
| 2 | practice of the method of claim 13 operating a switch for frames in a computer network |
| 3 | comprising: |
| 4 | using one or more indicia of frame type designation found in the received frame |
| 5 | to derive a virtual local area network (derived VLAN) value, said derived VLAN internal |
| 6 | to said switch; |
| 7 | using the derived VLAN value in making forwarding decisions. |
| | |
| 1 | 17. (Currently Amended) Electromagnetic signals traveling on a computer network, said |
| 2 | electromagnetic signals carrying information to practice the method of claim-13 operating |
| 3 | a switch for frames in a computer network comprising: |
| 4 | using one or more indicia of frame type designation found in the received frame |
| 5 | to derive a virtual local area network (derived VLAN) value, said derived VLAN internal |
| 6 | to said switch; |
| 7 | using the derived VLAN value in making forwarding decisions. |